

(e) the user terminal or user card receives and processes user information representative of the user;

(f) the user terminal or user card receives and processes billing information via the link in response to the order;

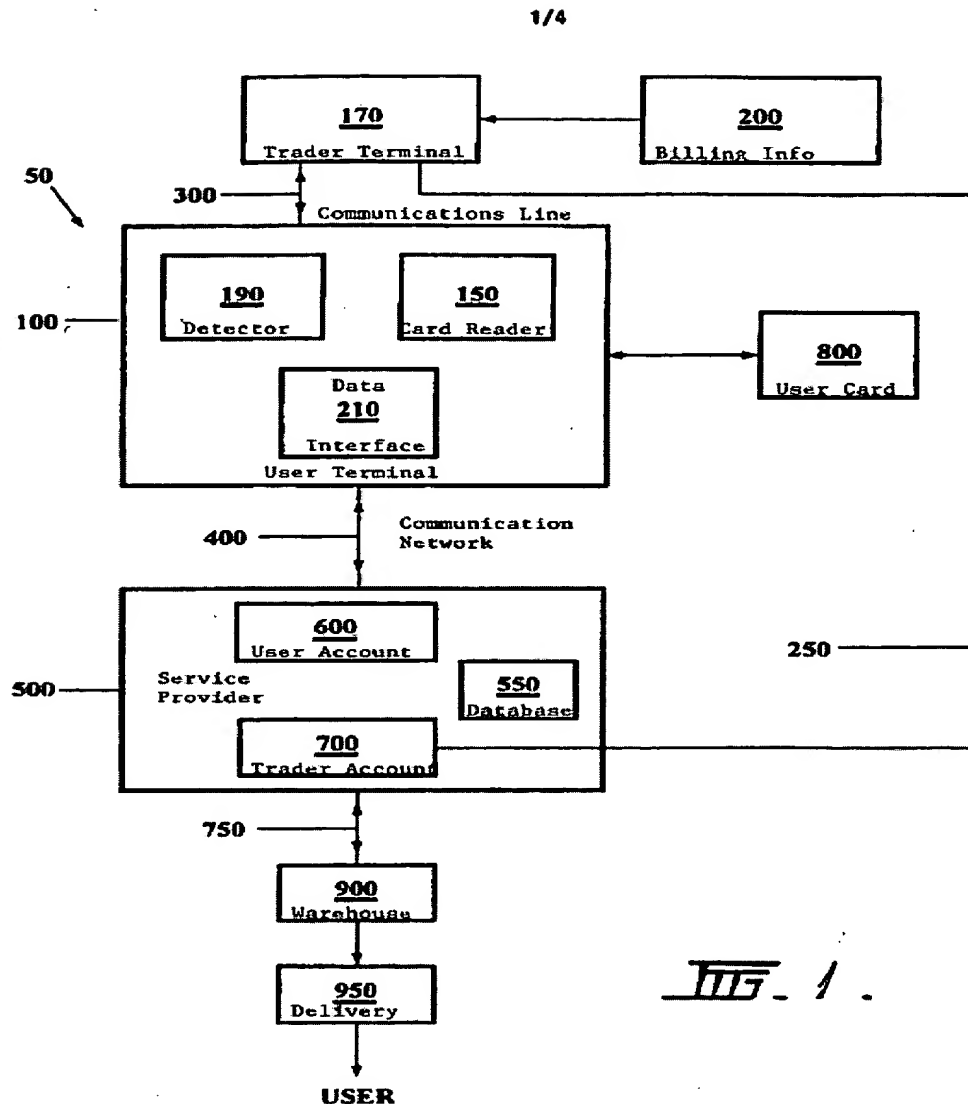
(g) a communication network, independent of the local communication link, enabling the user terminal to communicate with a service provider;

(h) the user terminal transmits the billing information and the user information to the service provider over the communication network; and

(i) the service provider automatically transmits the funds of the user to the trader under authorization of the user to effect a financial transaction between the user and the trader.

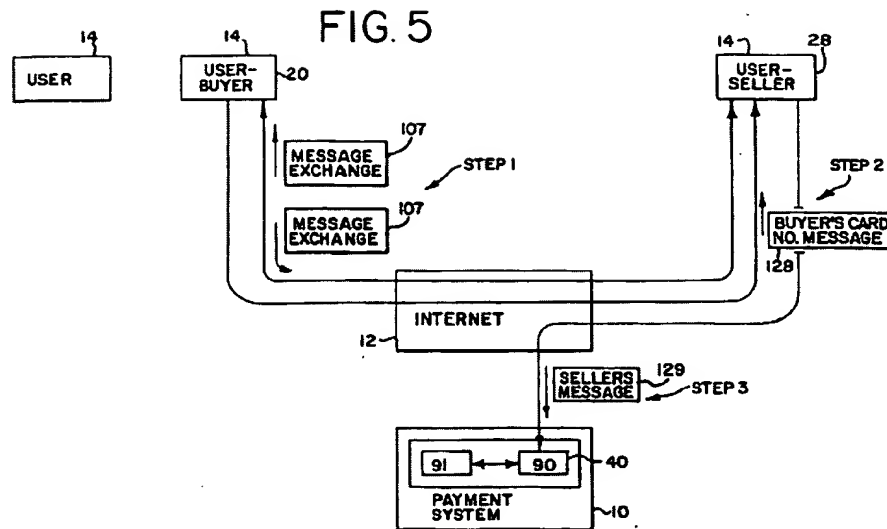
It should be noted that the method of Claim 36 has similar limitations.

The following is Figure 1 of the application with labeling added:



To aid the Examiner in understanding the presently claimed system, Attachment A is an Information Memorandum written in non-patent non-legalese. This attachment is for informational purposes only and is not intended to limit the interpretation of the claims.

The major distinction between the claim and Rose et al. are that Rose et al. is a seller driven/controlled system, not a buyer driven/controlled system. Rose et al. uses a single channel of communication between the buyer, seller and service provider, instead of separate, independent channels of communication between the buyer and seller and the buyer and service provider. As shown specifically in Figure 5, the channel of communication is the internet 12. The buyer-user 20 provides information to the user-seller 28 which then communicates the information to the payment of service system 10.



Specifically, Rose et al. states:

When the buyer 20 decides to buy the goods or services, the buyer 20 informs the seller 28 of the buyer's cardnumber 102 by providing an appropriate message 128 over the Internet 12 (step 2). The information included in the buyer's message 128 is represented in FIG. 6A. The message 128 may take the form of an e-mail message over the Internet 12 that includes the buyer's cardnumber, or alternatively, the buyer 20 may inform the seller of its cardnumber 102 by means of interactive protocols, or by including the cardnumber in a username in a file transferred from the buyer 20 to the seller 28 using the Internet 12, or by other means.

Referring again to FIG. 5, upon receiving the buyer's message 128 that includes the buyer's cardnumber 102, the seller 28 sends an [sic] payment-request message 129 to the payment system 10 via the Internet 12 (step 3). Specifically, the seller 28 sends the payment-request message 129 to the above-the-line program 90 on the above-the-line system 40. The payment-request message 129 may be sent by either e-mail or by using an interactive protocol on the Internet 12.

(Column 8, lines 1-19.)

On page 3, lines 2-3 of the Office Action, it states: "Rose teaches an alternative communication which may be utilized as a local communication link as a telephone (col 2 line 57)." And, on lines 7-8, it states: "Rose teaches a separate and distinguishable local communication line (telephone, dedicated links)." This is a total misinterpretation with respect to the claims. Column 2, lines 54-57 of Rose et al. specifically states: "The Inter net

network 12 is of a type that the users 14 can access by various means such as dedicated communication links or conventional commercial telephone systems.” This is how the users are connected to the internet. This is not an alternative to the internet. Thus, this is the same path that the user communicates with the seller and the seller communicates with the payment system. This is just an example of the kind of picking and choosing phrases within a patent to reach an interpretation which is counter to the content of the patent. Thus, there is no local communication link distinctive from the communication network in Rose et al.

Thus, the user-seller 28 is in control of the transaction, and sensitive information from the user-buyer 20 is available to user-seller 28 instead of being sent directly on a separate, distinct channel to the payment system 10. The claims of the present application are specifically directed to the user being in control of the transaction and communicating sensitive information to the payment system separate and independent from the communication between the user-buyer and user-seller. Thus, Rose et al. does not show the present invention.

Gifford is no different. As shown in Figure 1, the network 67 is the interconnection between the buyer computer 61, 62, the merchant computer 63, 64 and the payment computer 68.

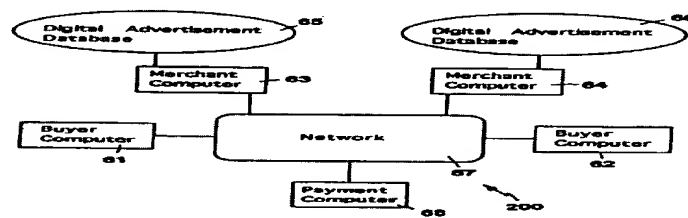


FIG. 1

Also, the buyer transmits a purchase message 25, including the user's account information, to the merchant computer, which then constructs and transmits a purchase order 27 to a payment computer, as illustrated in Figure 6.

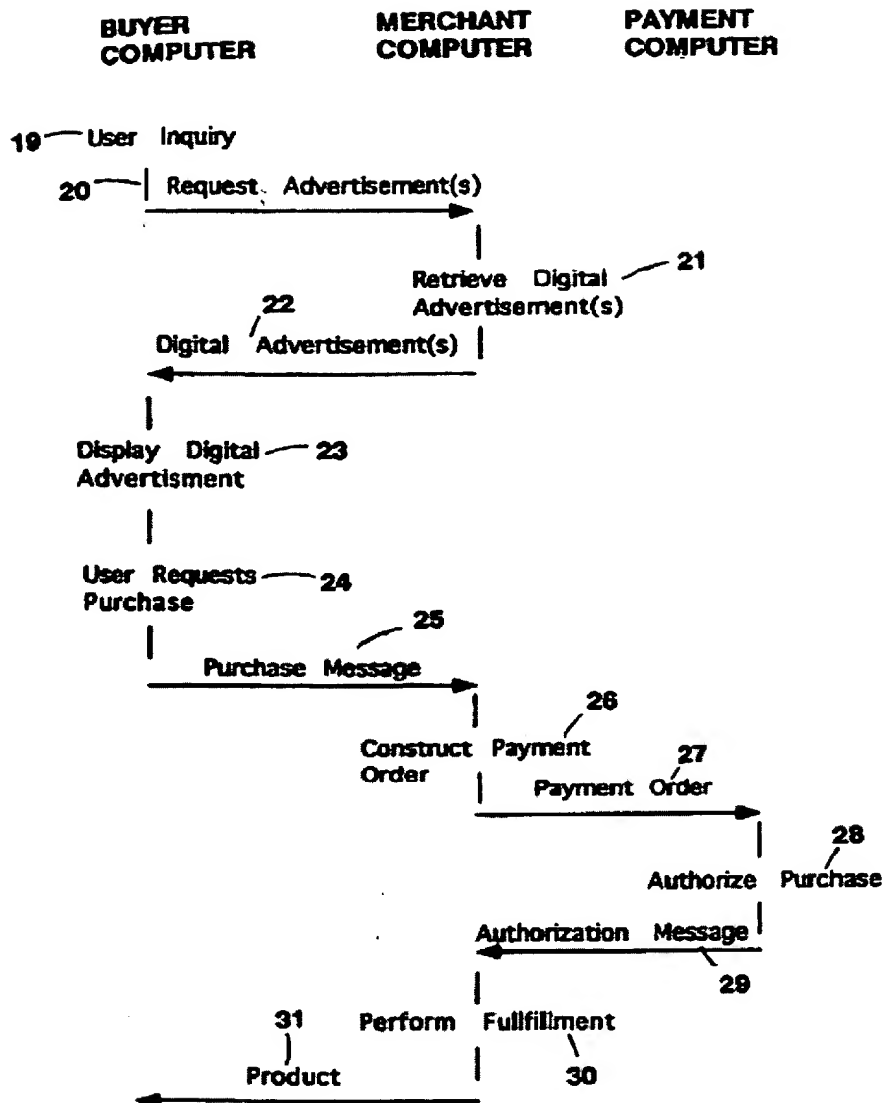


FIG. 6

As specifically described in Gifford:

The merchant computer then attempts to construct a payment order at 26 using the information it has gathered about the user. The buyer computer may have previously supplied certain credentials using fill out forms or other account identification means such as providing the network address of the buyer computer in the normal course of communication. If the merchant computer is able to construct a complete payment order at 26 the payment order is sent to a payment computer for authorization at 27. If a payment order can be constructed, processing continues at 28.

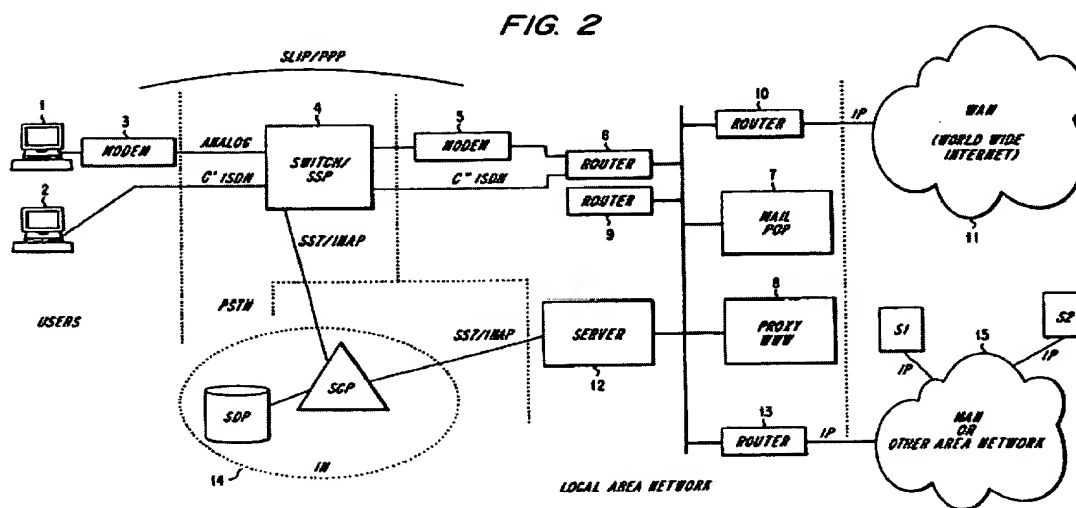
Alternatively, the buyer computer may construct the payment order at 24 and send it to the merchant computer at 25. In this case, the payment order assembly steps at 26, at the merchant computer, may only need to forward the payment order from the buyer computer.

A payment order includes user account information, merchant account information, an amount, and a nonce identifier that has not been previously used for the same user account. Variations of payment orders can be constructed, including payment orders that specify user or merchant identifiers in place of account information, payment orders that specify a valid time period, payment orders that specify foreign currencies, and payment orders that include comment strings. Part of the process of constructing a payment order is creating a corresponding authenticator using one of the authenticator methods described below.

(Column 6, lines 3-30.)

Thus, in Gifford, as in Rose et al., the credit information of the user-buyer is transmitted to the seller, which is then transmitted to the payment computer. Although a pre-authorized payment order is shown in Figure 12, the buyer requests a payment authorization from the payment computer over network 67, receives such authorized payment order and sends it to the buyer again over the network 67. Thus, the alternative in Figure 12 of Gifford also does not describe two separate communication links -- one between the buyer and the seller and one between the buyer and the payment computer.

The Melen et al. patent is a billing in the internet system, as illustrated in Figure 2.



The users 1 and 2 are connected to the service providers S1 and S2 through the local area network via routers 6, 9 and 13. The proxy WWW 8 is in control of this communication and provides the information via server 12 to the intelligent network 14. Thus, not only do the users 1 and 2 communicate to the service providers S1 and S2 through the local area network, but the service providers S1, S2 provide this information back through the local area network. The local area network is also the communication link for preparing and exchanging billing information. The proxy server 8 being the hub of the communication is described in column 8, paragraph beginning on line 25 through column 9, line 2 as follows:

If the user wants to move to a chargeable service advertised on some WWW-page within the MAN-network 15, he sends a request by clicking the link on this page. The request goes to the local area network PROXY-server 8, which as a response to the request calls the service provider server. When the connection is setup, the service provider server has received information about the local area network PROXY-server's 8 IP-address requesting the access, and the PROXY-server 8 itself knows the user's IP-address. The PROXY-server informs both addresses to the intelligent network, which now knows that the A-number connection using the IP-address in question has moved to a certain chargeable service. The billing bases are thus established. When the user makes a purchase in the chargeable service offered in the MAN-network 15, the PROXY-server 8 receives information about the purchase, because the user's control requests are transmitted by the PROXY-server 8, which thus communicates both with the user's terminal and the service provider server. Although the service provider only sees as the purchaser's address the address of the PROXY-server 8, the A-subscriber can be charged as the PROXY-server 8 itself knows the A-subscriber's IP-address and has submitted this information to the intelligent network and the intelligent network service program has record of all the numbers.

The billing can be performed in several different ways. The server can transmit the information about the purchase to the intelligent network 14 SCP for the use of the billing program, which based on the information given by service provider and recorded in the database calculates the price to be charged the A-number.

It is also possible for the intelligent network SCP to inform the PROXY-server 8 of the user's A-number and for the PROXY-server to form the billing record. The service providers' database can in that case be located with the contact company, which then can directly calculate the sum to be added to the

billing record. The subscriber data required to form the billing record can alternatively be forwarded by the server to the service provider server. The server informs the record to the PROXY-server, which forwards it to the intelligent network.

It is further possible for the service provider server to inform directly the sum to be added to the billing record. In such a case the chargeable service providers' database need not to be recorded in the intelligent network.

Thus, Melen et al. does not add any teachings to the common network communication of Rose et al. and Gifford.

The Wiseman patent is a system for conducting and processing spot commodity transactions. Transactions are conducted over wide area network 30. Gateways 90 and 92 within the subscriber site 1 connects a local area network 42 to a wide area network 30. Gateways 90 and 92 are only two of ten possible gateways. See Column 6, paragraph beginning on line 52. Merely because there are multiple gateways does not mean that there is separate and independent communication. The number of gateways is just to handle the volume connection to the wide area network. Wiseman is not even considered analogous art. Even though it does involve trading over a wide area network, that is not the same kind of system as Rose et al. and Gifford. It is impermissible to merely find general teachings and extract them from a very specific system to be used in a different type of system. Thus, it is not obvious to use Wiseman in combination with Rose et al. or Gifford.

Hilt et al. is an electronic bill paying system for consumers to generate messages directing financial institutions to pay a biller's bill. Applicant's system is not directed to a bill paying system. Applicant did not invent bill paying systems wherein a consumer directs its bank to pay bills. Applicant's system is a system for automatically conducting a business transaction between a user and trader. Electronic bill paying systems wherein the consumer directs a payment network to pay a bill and conduct a transaction between the consumer's bank and the biller's bank are well known. Merely because this concept is well known does not make it obvious to incorporate it into the communication between the seller and the buyer through the financial institutions where the consumer has received information from the seller over a separate communicate channel and has initiated not only the payment but the purchase of a product. It is not obvious how one would modify the systems of Rose et al. and Gifford to use the automatic bill paying system of Hilt et al., much less that of Melen et al.

The present rejection shows a pattern of hindsight reconstruction. Various elements are found in diverse environments and are combined to reconstruct the invention without any

motivation or teaching when considering each of the references as a whole. As summarized by the U.S. Court of Appeals for the Federal Circuit in *Ecolochem Inc. v. Southern California Edison*, 56 USPQ2d 1065 at 1072-73 (Fed. Cir. 2000):

We “cannot use hindsight reconstruction to pick and choose among isolated disclosures in the prior art to deprecate the claimed invention” . . .

Our case law makes clear that the best defense against hindsight-based obviousness analysis is the rigorous application of the requirement for a showing of a teaching or motivation to combine the prior art references . . . “Combining prior art references without evidence of such a suggestion, teaching, or motivation simply takes the inventor’s disclosure as a blueprint for piecing together the prior art to defeat patentability--the essence of hindsight” . . .

. . . Therefore, “[w]hen determining the patentability of a claimed invention which combines two known elements, ‘the question is whether there is something in the prior art as a whole to suggest the desirability, and thus the obviousness, of making the combination.’”

The rejection takes two computerized purchasing systems, Rose et al. and Gifford, wherein the buyer transmits his financial information to the seller and the seller communicates with the payment system, modifies them with a bill paying system of Melen et al. and Hilt et al. and further indicates the existence of multiple communication channels using a system for conducting and processing the spot commodity transaction of Wiseman. A typical example of reconstruction was discussed above in Wiseman, wherein the dual gateways 90 and 92 are to increase capacity and not as two separate channels which are purposely set to allow separate communication between the buyer and the seller and the seller and payment system.

The number of patents used also may be indicia of the non-obviousness of the combination. As stated in *In re Gorman*, 18 USPQ2d 1885, 1888 (Fed. Cir. 1991): “The criterion . . . is not the number of references, but what they would have meant to a person of ordinary skill in the field of the invention . . . [The] combination of about twenty references that ‘skirt[ed] all around’ the claimed invention did not show obviousness. In other instances, on other facts, we have upheld reliance on a large number of references to show obviousness.” The present rejection is no different in that all of the references skirt around the invention.

Based on the above arguments, Claim 1 is considered allowable over the art of record. Also, the method of Claim 36 provides a method including the local communication network being distinctive from the communication network in that the user terminal is in control of the transactions.

Applicant would also direct the Examiner to the limitations of Claims 2, 3, 37, 38 and new Claims 57 and 58. These claims are directed to the local communications link being automatically created when the user terminal or user card are in the vicinity of the trader terminal. These are direct one-on-one connections, not network connections. This type of connection for the user-trader interaction is not taught by the art of record nor would it be obvious to modify the art of record.

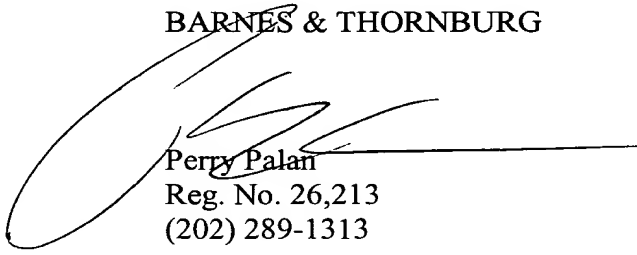
The other dependent claims are allowable for their own distinctive limitations, as well as those argued herein with respect to Claims 1 and 36.

An earnest attempt has been made to respond to the Examiner's rejections to place the application in condition for allowance. Upon review of the arguments, it will be evident that Claims 1-56 are allowable over the art of record. Thus, passage of this case to issue is respectfully solicited.

It is respectfully requested that, if necessary to effect a timely response, this paper be considered as a Petition for an Extension of Time sufficient to effect a timely response and shortages in other fees be charged, or any overpayment in fees be credited, to the Account of Barnes & Thornburg, Deposit Account No. 02-1010 (663/35631).

Respectfully submitted,

BARNES & THORNBURG



Perry Palan
Reg. No. 26,213
(202) 289-1313

Enclosure



Information Memorandum

Relative to the development of Xcellink

Prepared for the exclusive use of

UNITED STATES PATENT AND TRADEMARK OFFICE

PLEASE NOTE:

This document has been prepared for the commercial purposes of Xcellink and is not intended in any way to limit the generality of the granted and pending patent rights owned by Xcellink.

I. Introduction to Xcellink

I.1 What is Xcellink

what is it?

Xcellink is a patented business process that specifically covers the automated data interchange of a financial transaction between customers and merchants over a local or wireless electronic link.

Xcellink is a global commerce solution that addresses all the key issues of security and inter-operability with existing systems.

Xcellink has the capability to be used in every financial transaction as a low cost alternative to cash, potentially replacing all credit, debit, charge and smart cards.

Xcellink is unique in that it enables the user; rather than the merchant, to initiate and control the transaction - without the need to provide any credit card details.

Xcellink meets consumer demands for:

- Customer Control & Security
- Lower Transaction Costs
- Operational Simplicity
- Global User Access



how it works!

At the Point of Sale

Contract information is transmitted to a user terminal such as a mobile phone, wireless PDA, Internet access point or other communications device over a local or wireless electronic link.

The User Terminal

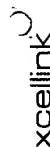
Contains information identifying the customer, the normal goods delivery point and the account from which funds will be withdrawn to make payment for the goods or services.

The Customer

Activates the user terminal that connects to the merchant's terminal over a local or wireless electronic link, with information needed for the contract being combined and forwarded over a telecommunications network to a Financial Service Provider.

Making Payment

Activation of the process is achieved when the customer approves the transaction by entering a PIN or other confirming signal, enabling the service provider to issue a message that transfers funds from the customer to the merchant.



*Xcellink facilitates
a new standard for
automated e-business
that addresses all
the key issues of
security and inter-
operability with
existing systems ...*

*... and enables
the customer, rather
than the merchant,
to initiate and control
the transaction.*

1.2 Overview

Xcellink is unique in that it enables the user, rather than the merchant, to initiate the transaction using an information appliance such as a mobile phone, wireless PDA, Internet access point or other communications device - without the need to go to and use a merchant terminal or provide any credit card details.

This local link mode of operation is also unique in its customer centric approach and its ability to enact a two-way transaction; with automatic or semi-automatic electronic data linking between a customer and a merchant using communications interfaces between the user, merchant, bank, manufacturer's warehouse, distribution system, and delivery agent.

The user's information appliance - more commonly a mobile phone - contains information identifying the customer, the normal goods delivery point and the account from which funds will be withdrawn to pay for the goods or services and is used to send these details over a telecommunications network to a Financial Services Provider.

The Xcellink architecture is built around the use of near real time messaging and the management of a common agent of the customer, the Financial Service Provider. This agent of the customer processes the information forwarded from the customer's mobile phone or other information appliance, and generates all the messages necessary to complete the transaction including, but not limited to:

- **Goods and Service Delivery**
- **Account Management**
- **Quality Control**
- **Taxation & Record Keeping**

These messages are not classical messages that advise people or organisations that activities have to be performed, but are automated process based commands that achieve their aims without intervention from the Financial Service Providers' processing system. They have the ability to apply contextual filtering that will attack fraud and accidental error, previously only available in the highest rated command and control systems.

Xcellink is also unique in that it centrally supports the emerging social standards for consumerisation; with a customer centric solution that includes customer control of their own environment by shifting much of the capability to control all aspects of the transaction in a contract from the trader to the customer, yet retains the ability of the trader to be assured that a transaction in progress is commercially sound.

The Xcellink environment is a trading methodology that satisfies the customer's desire for control and the trader's need for marketing, payment and innovative trade - with the process capable of automating all the elements of trade including advertising, order and delivery, quality control, taxation, and consumer protection.

Central to the imminent rollout of Xcellink has been the development and acceptance of local link technologies such as Bluetooth, Wi-Fi (Wireless Fidelity or 802.11) and NFC (Near Field Communication) wireless protocols, which provide the mechanism for the content of an Xcellink transaction to be seamlessly exchanged between the customer and the merchant at the local link level.

Appendix A - Xcellink - Breadth of Application

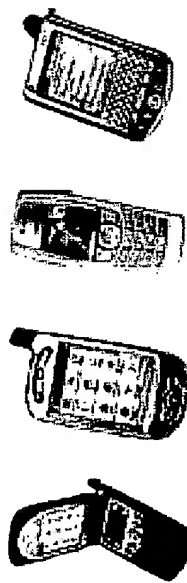
Xcellink covers a wide range of scenarios in which the consumer initiates and controls payment to a merchant over a local link - with the process able to be executed over a wide range of appliances and networks and extended beyond the traditional payments domain.

Appendices A.1 - User Applications - show a range of Xcellink user scenarios depicting the use of PSTN, Wireless and Satellite communication channels to achieve a real-time two-way data link between users of Xcellink and Financial Service Providers; with a brief description about the process and how it may be used or implemented.

Appliance Independent

The cards and Point of Sale terminals ("POS") that have traditionally been used to process payments have been very much purpose built. Increasingly, advances in communications and information technology are allowing "Information Appliances" to play many roles.

The following are just a few of the appliances available in 2003:



Mobile appliances are becoming very sophisticated and have the technology needed to become the consumer's own personal "ATM" terminal - with more processing power, memory; faster network connections and better displays than conventional Point of Sale terminals.

Customers can readily see what is available, the price, any discount offers or "coupons", select the goods and initiate payment. Xcellink ideally suited to this application. The merchant would receive proof of payment on a traditional POS terminal, a PC, or an Information Appliance like the consumers.

Network Independent

Xcellink requires a local or wireless electronic link but is not limited to any particular technology:

- Wi-Fi (802.11)
 - Bluetooth
 - Infrared
 - NFC (Near Field Communication)
- Xcellink can work over a range of wide area networks:
- The telephone network or the Internet
 - Wireless data - GPRS, 1xRTT, and 3G models
 - EFTPOS and other dedicated networks

The business process is largely technology independent and the licensee has the option of a wide range of deployment scenarios.

While scenarios involving existing point of sale terminals do have significant upgrade costs because they are not able to provide communication interfaces that can enable near real-time access and low cost automated data linking, other scenarios such as the use of home PCs and mobile appliances allow rapid deployment and new opportunities to provide location and network independent payments.

In high exposure transactions, demanding more security and encryption than is reasonably expected in many consumer terminals, highly protected computer terminals and communications links can provide the access to Xcellink control systems. The data and messaging structures are the same, and the additional protections are provided by physical security and the appropriate trusted software controls.

Process can Extend Beyond Payments

Xcellink takes a broader view of the process than traditional merchant-centric payment approaches. Being customer-centric, the patent anticipates the incorporation of elements that are common to the customers' use of payments - preferences, delivery details etc. Hence the payments process can extend from the customer first becoming aware of what they might purchase, through to warehousing, delivery, payment and taxes (if relevant).

Technology Independent

The patented business process is largely technology independent and the licensee has the option of a wide range of deployment scenarios. Some aspects that may be relevant to particular licenses include: national and international standardisation of data formats, attention to process sequencing and timing, agreements on language inter-operability and meaning, minimum standards for computing trustedness and security.

Industry Independent

Xcellink can apply in all current payments scenarios and has application in the banking, transport, utilities and infrastructure environments, addressing issues such as advertising offers, orders, acceptance, payment, delivery, taxation, quality assurance, customer protection and security.

Operation Processes

The customer activates the user terminal that connects to a particular merchant's terminal over the local communications link with information needed for the contract being combined and forwarded over a telecommunications network to the Xcellink Service Provider.

Activation of the process is achieved when the customer approves the transaction by entering a PIN or other confirming signal, enabling the service provider to issue a message that transfers funds from the customer to the merchant.

When funds clearance or reservation is achieved, which can be immediate or delayed until the goods have been delivered or the service provided, an electronic message is sent to the warehouse and the goods may then be packed and dispatched to the customer.

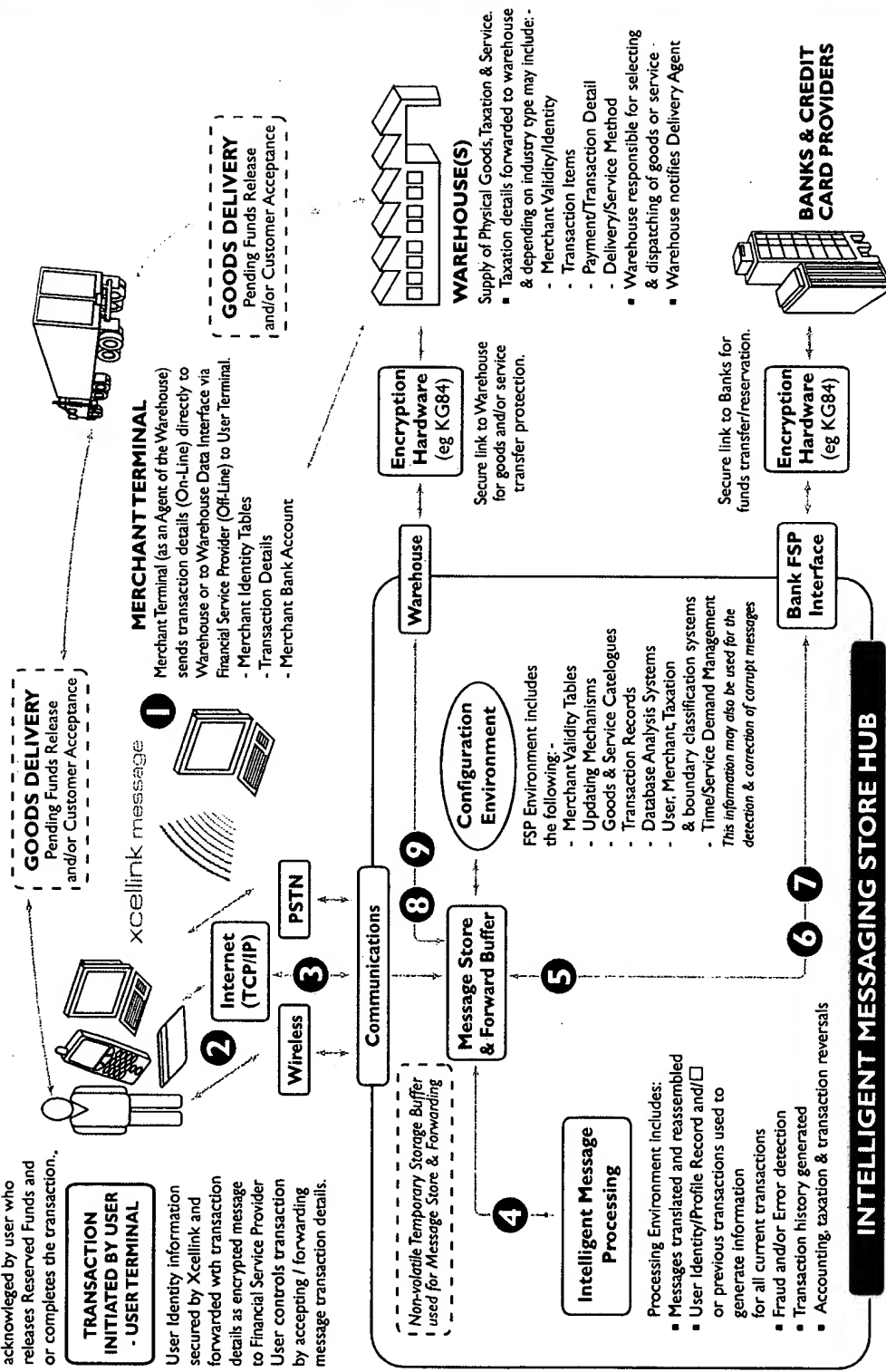
Appendices A I - Xcellink - Transaction Flow

GOODS ACCEPTANCE

- Acceptance of delivered goods acknowledged by user who releases Reserved Funds and completes the transaction.

**TRANSACTION
INITIATED BY USER
- USER TERMINAL**

- User Identity information secured by Xcellink and forwarded with transaction details as encrypted message to Financial Service Provider
- User controls transaction by accepting / forwarding message transaction details.



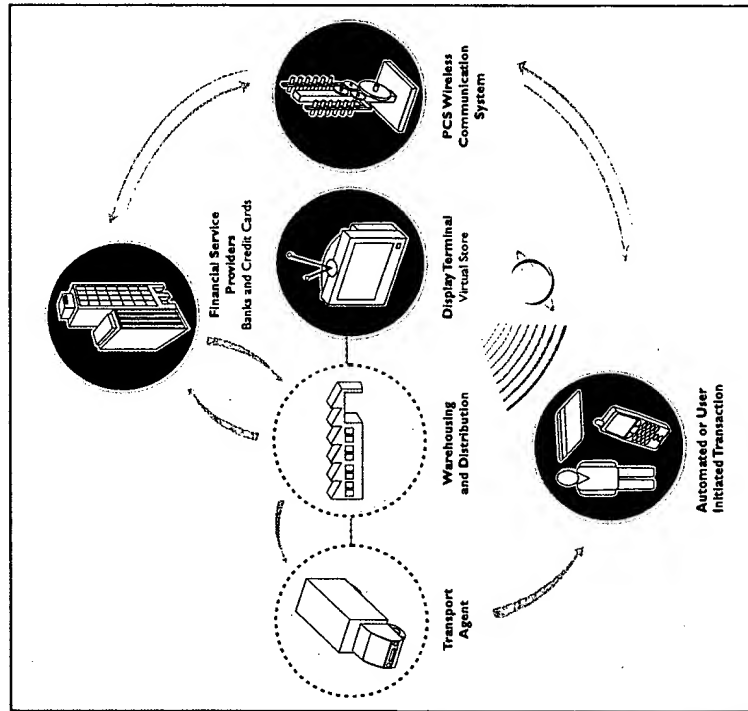
Xcellink is a patented business process that specifically covers the automated data interchange of a financial transaction between customers and merchants over a local or wireless electronic link.

Xcellink is unique in that it enables the user, rather than the merchant, to initiate the transaction using an information appliance such as a mobile phone, wireless PDA, Internet access point or other communications device - without the need to provide any credit card details.

Appendices A2 - User Application

One Way Advertisement

Advertised goods purchased from 'Virtual' Stores i.e. TV Displays or Internet Terminals, by using a Mobile Phone's InfraRed capability to read transmissions of machine-readable barcodes containing information about the goods or services, the price and a merchant identifier.

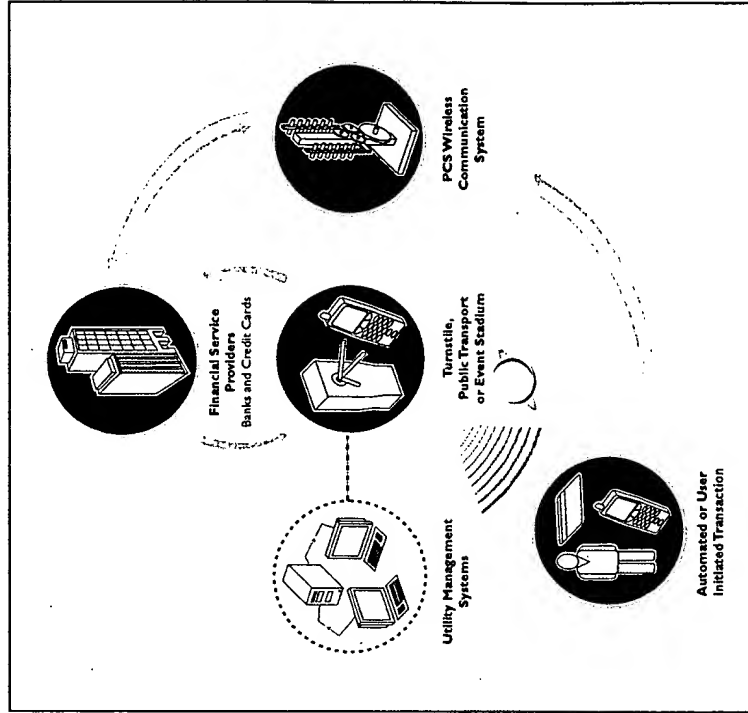


Turnstile or Public Transport

User Appliance - Mobile phone, wireless PDA, Internet access point or other communications device

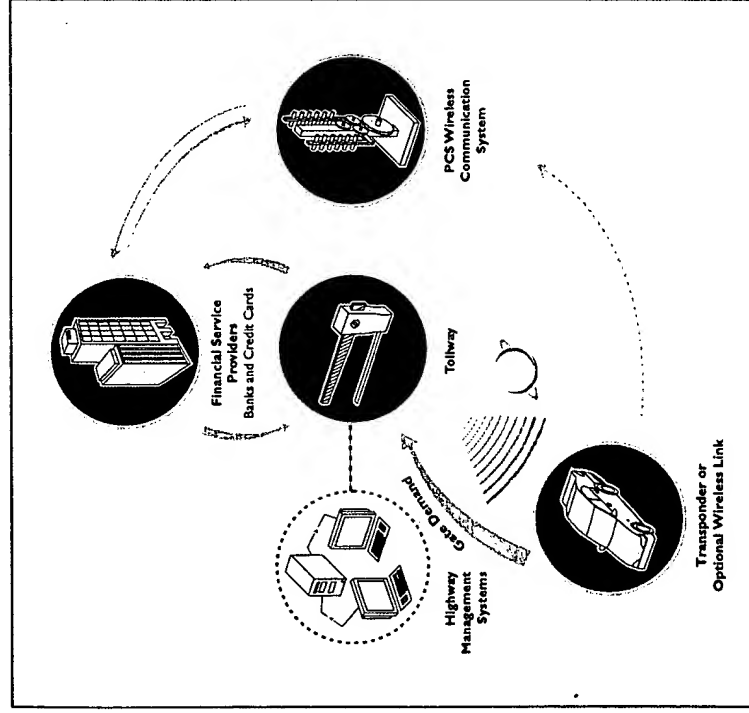
Option A - User demands entry/Allow Access

Option B - Bank/Service Provider demands payment



Highway Tolling

- Option A - Vehicle demands delivery/Open Gate
- Option B - Bank/Service Provider commands delivery
- Option C - Variable User/Time Resource Charging



Utility Services - Demand Metering

Customer 'Pay as you use' charging - with the Supplier being able to manage supply according to demand and usage by residence, suburb or region thereby maximising the investment in/for and allocation of resources.

